INSTRUCTION TEXT CONTROLLED SELECTIVELY STATED BRANCHES
FOR PREDICTION VIA A BRANCH TARGET BUFFER

ABSTRACT OF THE DISCLOSURE

Disclosed is a method and apparatus providing the capability to prevent particular branches from being written into the BTB, thereby making them non-predictable. By making certain branches only detectable at decode time frame, branch prediction can completely run asynchronous of decode. By allowing branch prediction logic to cover as wide a range of branches as possible, the efficiency of fetching of branch targets way before the branch itself achieves a higher level of precision. This increased level of precision eliminates pipeline stalls between branches and targets where prior concerns of creating data integrity within the pipeline of a microprocessor existed.

IBM-POU920030065